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IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF ALASKA

In re Crash of Aircraft N93PC)	No. 3:15-cv-0112-HRH
)	[Consolidated with
on July 7, 2013, at Soldotna, Alaska)	No. 3:15-cv-0113-HRH and
_____)	No. 3:15-cv-0115-HRH]

ORDER

Motions in Limine to Exclude Testimony of John Cochran

Defendants Texas Turbine Conversions, Inc. and Recon Air Corporation move to exclude certain testimony of plaintiffs' expert, Dr. John Cochran.¹ These motions are opposed.² The request for oral argument on these motions has been withdrawn,³ and the court deems oral argument unnecessary.

Background

On July 7, 2013, a deHavilland DHC-3 "Otter" airplane operated by Rediske Air, Inc. and piloted by Walter Rediske crashed shortly after take-off from the Soldotna Airport. Rediske and all of the passengers on board were killed in the crash. Plaintiffs, which are the

¹Docket Nos. 268 and 311.

²Docket Nos. 294, 296, 337, and 338.

³Docket No. 358.

estates of the passengers and Rediske, assert wrongful death, negligence, strict liability and breach of warranty claims against defendants.

The subject aircraft was modified in 2010. As part of that modification, Recon Air installed a Texas Turbine conversion kit which converts a standard piston engine to a turbine engine. Texas Turbine provides the conversion kit pursuant to an FAA approved supplemental type certificate, STC #SA09866C. The conversion kit contains the parts necessary to mount a turbine engine in the aircraft. More specifically, the “conversion kit includes a new propellor, engine mount, starter/generator, instruments, engine cowlings, batteries, oil cooler, generator control unit, steel enclosures for batteries and electrical relays, bleed-air ejector vacuum system, bleed-air heater system, and other miscellaneous components.”⁴ The turbine engine that was installed in the subject aircraft was manufactured by Honeywell. As part of the 2010 modification, Recon Air also installed a Baron Short Takeoff & Landing (STOL) kit. The STOL kit was provided by Stolairus Aviation, Inc.

Plaintiffs contend that their negligence claim against Texas Turbine is based on allegations that Texas Turbine “was negligent in failing to determine that the addition of its Texas Turbine Conversion kit to a DHC-3 aircraft[] effected the aircraft’s neutral point, which contributed to the aircraft being unstable in pitch[.]”⁵ Plaintiffs contend that their

⁴Texas Turbine Conversions, Inc.’s Motion for Summary Judgment at 3, n.8, Docket No. 267.

⁵Plaintiffs’ Responses to Texas Turbine’s Motion in Limine to Exclude the Testimony of Dr. John Cochran at 1, Docket No. 294.

strict liability claim against Texas Turbine is based on the fact that Texas Turbine was “the seller of the Honeywell engine that failed in flight.”⁶ Plaintiffs’ claims against Recon Air are based on allegations that as an installer, it had a responsibility to ensure that all of the modifications were compatible and

in particular, failed to detect that the incorporation of the Texas Turbine Conversion and the “STOL Kit” into the accident aircraft had changed a critical relationship between the aircraft’s “center of lift” (CL)[⁷] and “center of gravity” (CG),[⁸] and this change in relationship caused the accident aircraft to be uncontrollable in the longitudinal axis (nose up and down) axis, which resulted in a stall and fatal crash after an in-flight engine failure.[⁹]

Plaintiffs retained Dr. John Cochran as an expert to provide “opinions as to the cause, or causes, of the accident.”¹⁰ Dr. Cochran is a professor of aerospace engineering, whose

⁶Id.

⁷The “center of lift” is “[t]he location along the chord line of an airfoil at which all of the lift forces produced by the airfoil are considered to be concentrated.” FAA Weight and Balance Handbook, Exhibit A at 3, Plaintiff’s [sic] Responses to Recon Air Corporation’s Motion in Limine to Exclude the Testimony of Dr. John Cochran, Docket No. 337.

⁸The “center of gravity” or “CG” is “[t]he point at which an airplane would balance if suspended.” Id.

⁹Plaintiff’s [sic] Responses to Recon Air Corporation’s Motion in Limine to Exclude the Testimony of Dr. John Cochran at 2, Docket No. 337.

¹⁰Expert Report of John E. Cochran, Jr., Exhibit A at 4, Memorandum in Support of RAC’s Motion in Limine No. 2 (Cochran), Docket No. 312.

“academic specializations include dynamics, guidance, stability, and control of airplanes, helicopters, missiles, and launch vehicles.”¹¹ Dr. Cochran has offered three opinions:

Opinion 1. The accident aircraft . . . crashed because it was unstable in pitch. The pitch instability was due to the changes in the neutral point location^[12] caused by the installed Stolairus STOL kit, the Texas Turbine conversion, i.e., turbine engine, propeller, and modifications of the aircraft’s nose.

* * *

Opinion 2. Texas Turbine, Inc. should have determined the effects of its conversion on the neutral point location in converted DHC-3 aircraft.

* * *

Opinion 3. Both Stolairus Aviation, Inc. and Texas Turbine, Inc. should have conducted flight tests to determine the effects of their STCs on the neutral point location in a DHC-3 aircraft.^[13]

Dr. Cochran relied on the NTSB’s Video Study and Soldotna Kinematics Study in formulating his opinions, in particular his Opinion 1. One of the passengers on the accident aircraft made a cell phone video, and the NTSB’s investigators “analyzed the video and produced an estimated trajectory of the aircraft (altitude vs. time) and estimates of its pitch

¹¹Id. at 3.

¹²The “neutral point location” is the same as the “center of lift.”

¹³Expert Report of John E. Cochran, Jr., Exhibit A at 14-15, Memorandum in Support of RAC’s Motion in Limine No. 2 (Cochran), Docket No. 312.

angle and ground speed.”¹⁴ The NTSB then used the Video Study to generate a report entitled the Soldotna Kinematics Study, in which the NTSB estimated the accident aircraft’s weight and the center of gravity location at the time of the accident. Using the NTSB data, Dr. Cochran did his own mathematical calculations and based on those calculations concluded that at 11.25 seconds after the accident aircraft left the runway, “[t]he large values of angle of attack and decreasing speed indicate that a stall is imminent. The rate of increase indicates that the aircraft is unstable in pitch.”¹⁵

Texas Turbine and Recon Air (referred to collectively as “defendants” herein) now move to exclude Dr. Cochran’s opinions and testimony.

Discussion

Rule 702 of the Federal Rules of Evidence provides that expert opinion evidence is admissible if: (1) the witness is sufficiently qualified as an expert by knowledge, skill, experience, training, or education; (2) the scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (3) the testimony is based on sufficient facts or data; (4) the testimony is the product of reliable principles and methods; and (5) the expert has reliably applied the relevant principles and methods to the facts of the case.

City of Pomona v. SQM North America Corp., 750 F.3d 1036, 1043 (9th Cir. 2014). “Before admitting expert testimony into evidence, the district court must perform a ‘gatekeeping role’ of ensuring that the testimony is both ‘relevant’ and ‘reliable’ under Rule 702.” United

¹⁴Id. at 5.

¹⁵Id. at 8.

States v. Ruvalcaba-Garcia, 923 F.3d 1183, 1188 (9th Cir. 2019) (quoting Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579, 597 (1993)).

“Relevancy simply requires that ‘the evidence logically advance a material aspect of the party’s case.’” Id. (quoting Estate of Barabin v. AstenJohnson, Inc., 740 F.3d 457, 463 (9th Cir. 2014)). “Expert testimony which does not relate to any issue in the case is not relevant and, ergo, non-helpful.” Daubert, 509 U.S. at 591 (citation omitted).

“‘[R]eliability’ . . . requires that the expert’s testimony have ‘a reliable basis in the knowledge and experience of the relevant discipline.’” Ruvalcaba-Garcia, 923 F.3d at 1188-89 (quoting Barabin, 740 F.3d at 463). “The district court must assess whether ‘the reasoning or methodology underlying the testimony is scientifically valid’ and ‘properly can be applied to the facts in issue[.]’” Id. at 1189 (quoting Daubert, 509 U.S. at 592–93). “‘The district court is not tasked with deciding whether the expert is right or wrong, just whether his testimony has substance such that it would be helpful to a jury.’” City of Pomona, 750 F.3d at 1044 (quoting Alaska Rent-A-Car, Inc. v. Avis Budget Group, Inc., 738 F.3d 960, 969-70 (9th Cir. 2013)). “The court must assess the expert’s reasoning or methodology, using as appropriate criteria such as testability, publication in peer-reviewed literature, known or potential error rate, and general acceptance.” Id. “‘But these factors are meant to be helpful, not definitive, and the trial court has discretion to decide how to test an expert’s reliability as well as whether the testimony is reliable, based on the particular circumstances of the particular case.’” Id. (quoting Primiano v. Cook, 598 F.3d 558, 564 (9th Cir. 2010)).

As an initial matter, plaintiffs contend that defendants have misstated Dr. Cochran's first opinion. Defendants contend that Dr. Cochran opined that the modifications moved the aft center of gravity limit forward by 3.12 inches. Plaintiffs, however, contend that "Dr. Cochran's opinion is" that the modifications "moved the neutral point of a DHC-3 Otter 3.12 inches forward."¹⁶ In other words, plaintiffs seem to be contending that defendants think Dr. Cochran was opining about the center of gravity when he was actually opining about the neutral point.

Defendants argue that the distinction between the neutral point and the center of gravity is irrelevant to what is at issue in the instant motions. Defendants contend that the primary issue here is whether Dr. Cochran's opinions are reliable in light of the fact that he has admitted that flight testing is the only way to confirm his mathematical hypothesis. Dr. Cochran's opinions are based on his use of aerodynamic mathematical principles, but defendants argue that mathematical models are not the most reliable means to predict real-world flight characteristics, as Dr. Cochran acknowledged. In his report, Dr. Cochran stated that "the best way to determine the effects of power on the stability characteristics of a single-engine, propeller driven aircraft is through flight tests of the aircraft."¹⁷ And in support of his Opinion 3, Dr. Cochran stated that "[f]light tests are the best, and often the

¹⁶Plaintiffs' Responses to Texas Turbine's Motion in Limine to Exclude the Testimony of Dr. John Cochran at 7, Docket No. 294.

¹⁷Expert Report of John E. Cochran, Jr. at 10, Exhibit A, Memorandum in Support of RAC's Motion in Limine No. 2 (Cochran), Docket No. 312.

only, way to determine effects of nonlinear aerodynamics.”¹⁸ But what Dr. Cochran was unaware of when he wrote his report, according to defendants, is that Texas Turbine had conducted flight testing in 2000. Defendants contend that this 2000 flight testing was conducted under FAA supervision and included “test of the flight and handling characteristics of the airplane beyond maximum gross weight, up to and beyond the existing aft CG limits published in the Airplane Flight Manual for the DHC-3.”¹⁹ At his deposition, Dr. Cochran testified that since he wrote his expert report, he learned that Texas Turbine had conducted the 2000 flight testing and that he

had no reason to question the accuracy of the data. It appeared to be -- the flight tests, multiple ones, appeared to be done in the proper manner with FAA representation and Texas Turbine pilots and so forth. And so as far as it goes, I would say that . . . there was no question about the test.^[20]

Dr. Cochran further testified that “I can’t fault Texas Turbine for doing what the FAA said they needed to do to get the aft CG” and “I can say that Texas Turbine apparently did what was required of them as far the FAA is concerned.”²¹ Thus, defendants contend that Dr. Cochran’s second opinion (that Texas Turbine should have determined the effects of its

¹⁸Id. at 15.

¹⁹Texas Turbine Conversions, Inc.’s Motion for Summary Judgment at 2, Docket No. 267.

²⁰Deposition of John E. Cochran at 29:16-22, Exhibit B, Texas Turbine Conversions, Inc.’s Motion to Exclude Testimony of Plaintiffs’ Expert John Cochran, Exhibit B, Docket No. 268.

²¹Id. at 123:15-16; 124:7-9.

conversion on the neutral point) is not just unreliable, but wrong, which in turn, renders his first opinion unreliable (that the change in neutral point caused the pitch instability).

As plaintiffs point out, Dr. Cochran raised some questions about the 2000 flight tests.

At Dr. Cochran's deposition, the following exchange took place:

Q Do you agree that in those flight tests the aircraft handled acceptably in all flight regimes?

A Most of them.

Q In which flight regime did the flight test not show that the aircraft handled acceptably?

A There's some question about what happens when . . . they were testing the aircraft at aft CG and gross weight actually a little bit over 8,000 pounds with . . . landing flaps and doing stalls. Because during that test they got a rolling of the aircraft and yawing that was not exactly what you would want to have because the aircraft rolled 30 degrees or more[.] And you would like for the aircraft to stall in such a way that it just stays wing level and just pitches down after it stalls in a recovery mode.

Q I may --

A Furthermore -- well, there's one more, thing, too, that's a little bit different here. The -- they indicate in the test that they're doing the test at 75 percent torque instead of maybe 100 percent torque which would imply that . . . they're not conducting the test at full . . . power.

Q And what implication does that have, in your opinion?

A Power affects the stability of the aircraft, the application of power. And the application of more power affects the stability more. So that would -- that would change, change things.

Q So recognizing that the flight test showed that the aircraft was operating at 75 percent torque, do you agree that the flight test as reported by Texas Turbine indicated that the aircraft handled acceptably?

A Well, it was accepted. It did not handle as they expected it, I don't think.^[22]

Dr. Cochran's testimony does not indicate that Dr. Cochran thought the 2000 flight tests were sufficient or that they changed his opinion that flight testing should have been done after the 2010 conversion of the accident aircraft was completed.

Moreover, the 2000 testing was not the type of flight testing that Dr. Cochran has opined defendants failed to do here. Rather, Dr. Cochran testified that Texas Turbine did not do a flight test of "an aircraft which had both the Texas Turbine conversion and the STOL kit" and that "a lot of my opinion, total opinion, is based on the fact that in combination, the addition of the STOL kit plus the change to the turbine engine together caused changes in the stability of the aircraft."²³ Dr. Cochran explained that it was his opinion that

a test to determine the neutral point location, neutral point movement, and so forth would be the kind of test that you would do. And it would require that you fly the aircraft at different flight conditions and measure the change in . . . the elevator deflection, the function of lift coefficient and some things like that, change the CG and make some plots, a plot to determine by extrapolation the neutral point. That would be one kind of test.^[24]

²²Cochran Deposition at 30:2-31:14, Exhibit B, Texas Turbine Conversions, Inc.'s Motion to Exclude Testimony of Plaintiffs' Expert John Cochran, Exhibit B, Docket No. 268.

²³Id. at 28:22-29:3.

²⁴Id. at 174:23-175:7.

Dr. Cochran testified that if this type of flight testing had been done, flight testing an aircraft that contained both the turbine conversion and the STOL kit, it would have helped determine whether his opinions were correct or not.²⁵

Defendants are quick to point out that Dr. Cochran did not actually do this type of flight testing. In fact, at his deposition he testified that he “didn’t really push [the need for flight testing] that much or anything. But, I mean, my conclusion was that you, know, they should have done the test. But . . . that’s basically where it stopped[.]”²⁶

Nonetheless, plaintiffs argue that Dr. Cochran’s opinions are not unreliable simply because he did not perform flight testing that he opined should have been done. Plaintiffs insist that his opinions are reliable because they are based on proven aerodynamic formulas, formulas that were also used by defense expert, Mark Madden, and by the NTSB investigators. Plaintiffs insist that Dr. Cochran’s methodology of calculating the movement of the neutral point on the accident aircraft is based on sound and well-established aerodynamic formulas and principles. Plaintiffs contend that flight testing is simply another methodology and that “[i]t is not uncommon for opposing experts to reach different conclusions, using different methodologies. It is for the jury to assess which is the more reliable and helpful.” Lewert v. Boiron, Inc., 212 F. Supp. 3d 917, 934 (C.D. Cal. 2016) (quoting Rocky Mountain PSI, LLC v. Thayer, No. CV 13-23, 2015 WL 1579492, at *3 (D.

²⁵Id. at 176:5-11.

²⁶Id. at 175:19-22.

Mont. Apr. 9, 2015)). Plaintiffs argue that expert testimony should not be excluded merely because one expert uses one methodology and one expert uses another methodology, if both methodologies are accepted and proven in the field. “Daubert neither requires nor empowers trial courts to determine which of several competing scientific theories has the best provenance.” Marketquest Group, Inc. v. BIC Corp., Case No. 11-cv-618-BAS (JLB), 2018 WL 1756117, at *4 (S.D. Cal. April 12, 2018 (quoting Ruiz-Troche v. Pepsi Cola, 161 F.3d 77, 85 (1st Cir. 1998))).

Defendants dispute that flight testing is simply a different methodology. Rather, defendants contend that according to Dr. Cochran himself, it is the superior methodology. Defendants contend that this is not a case in which the jury will be able to weigh the merits of two different methodologies as plaintiffs seem to be suggesting but rather is a case in which plaintiffs’ expert has conceded that flight testing is the superior methodology and the only way to prove his theories.

But even if flight testing is simply another methodology, defendants argue that Dr. Cochran’s opinions should still be excluded as unreliable because the very flight testing he recommended was in fact completed after his deposition. Robert Carducci, a defense expert, observed this 2018 flight testing and reports that a DHC-3 aircraft modified with the turbine conversion and the STOL kit, with full flap setting, was controllable with an aft center of

gravity of 152.2. inches, which was the published limit at the time of the accident.²⁷ In other words, according to defendants, the flight testing proved the combined installation of the Texas Turbine conversion and the STOL kit did not affect the controllability of the aircraft. Thus, defendants argue that Dr. Cochran's opinions have been demonstrated to be incorrect by the very means he acknowledged was the best way to test his theories. Given that Dr. Cochran's opinions have been refuted by reliable evidence, defendants argue that his opinions cannot possibly be considered reliable and they should be excluded.

The fact that defendants have now flight tested an aircraft with both the turbine conversion and the STOL kit installed raises some questions about Dr. Cochran's opinions, but it does not render his opinions unreliable. The mathematical methodology he used is based on well-established aerodynamic formulas and principles, which make his opinions reliable, as far as they go.

Defendants next argue that Dr. Cochran's opinions are unreliable because they are based on insufficient facts or data. Defendants contend that Dr. Cochran stated that in determining whether the aircraft was unstable in pitch during takeoff, one must accurately calculate the angle of attack of the accident aircraft and the neutral point. Defendants argue that Dr. Cochran made critical mathematical errors when he re-calculated the NTSB raw data from the Kinematics Study. As defense expert Carducci opined, "Dr. Cochran has made

²⁷Carducci Rebuttal Report at 33-34, Exhibit C, Texas Turbine Conversions, Inc.'s Motion to Exclude Testimony of Plaintiffs' Expert John Cochran, Docket No. 268.

significant errors in his calculations for ground speed, flight angle, pitch angle, and angle-of-attack.”²⁸ In particular, defendants contend that Dr. Cochran incorrectly calculated the pitch angle values, which were then used to derive the geometric angle of attack. Because his opinions are based on his mathematically incorrect calculations, defendants argue that Dr. Cochran’s opinions cannot be considered reliable.

But, “the factual basis of an expert opinion goes to the credibility of the testimony, not the admissibility.” Hangarter v. Provident Life & Acc. Ins. Co., 373 F.3d 998, 1018 n.14 (9th Cir. 2004) (quoting Children’s Broad. Corp. v. Walt Disney Co., 357 f.3d 860, 865 (8th Cir. 2004)). If Dr. Cochran made mathematical errors, that is something defendants can cross-examine him about. But it is not necessarily a reason to exclude his expert testimony.

Defendants next argue that Dr. Cochran’s opinions are not reliable because he failed to consider that the landing flaps were fully extended when the accident aircraft was taking off. At his deposition, Dr. Cochran testified that having the landing flaps fully extended would affect the movement of the neutral point,²⁹ but that he did not factor this in because “I did not have enough information to come up with an estimate for the fully extended flaps.”³⁰ Dr. Cochran testified that in order for an aircraft to be stable, the neutral point

²⁸Carducci Rebuttal Report at 40, Exhibit C, Memorandum in Support of RAC’s Motion in Limine No. 2 (Cochran), Docket No. 312.

²⁹Cochran Deposition at 54:16-20, Exhibit D, Memorandum in Support of RAC’s Motion in Limine No. 2 (Cochran), Docket No. 312.

³⁰Id. at 54:8-9.

should be behind the center of gravity, or in other words, be “between the center of gravity and tail . . . of the aircraft.”³¹ He then explained that “[a]s soon as the center of gravity is behind the neutral point, the aircraft is unstable” and that “inputs from the pilot” such as “lowering or raising the flaps” can move the neutral point.³² More specifically, he testified that lowering the flaps moves the neutral point forward.³³ And, Dr. Cochran agreed that the use of full flaps at the time the accident aircraft was taking off negatively affected the pilot’s ability to control the aircraft.³⁴ Defendants argue that even though Dr. Cochran knew all of this, he basically ignored the fact that the landing flaps were fully extended when the accident aircraft was taking off, which defendants argue makes his opinions unreliable.

This is an issue about which defendants can cross examine Dr. Cochran. But it is not an issue that makes his opinions inadmissible.

Defendants next argue that Dr. Cochran’s opinions are unreliable because he ignored evidence that the pilot did not conduct an actual weight and balance prior to take off. At his deposition, Dr. Cochran was asked if he had been provided any information that would indicate or suggest that the pilot had performed a weight and balance, and Dr. Cochran testified that he did not recall any such information but he “assumed” that the pilot had

³¹Id. at 153:2-6.

³²Id. at 153:11-154:1.

³³Id. at 154:2-4.

³⁴Id. at 172:12-17.

performed some kind of weight and balance because “an experience pilot would want to do a weight and balance just to make sure that he would be able to fly the airplane. . . .”³⁵ But defendants contend that there is evidence that the pilot did not do a weight and balance. They offer an NTSB witness statement from Merrill McGahan, who had brought the cargo that was loaded on the accident aircraft out to the airport, in which McGahan stated that he and the pilot did not weigh the cargo but simply estimated that it weighed 300 pounds.³⁶ Defendants thus insist that Dr. Cochran’s assumption as to what the pilot did on the day of the accident is baseless. And they argue that this is significant because others have concluded that the accident was caused, in part, because the aircraft was improperly loaded.

There are questions of fact as to whether the pilot performed a weight and balance calculation on the day of the accident. McGahan’s statements that they did not weigh the cargo is not conclusive proof that the pilot did not do a weight and balance calculation prior to accident flight.

Defendants next argue that any causation opinions from Dr. Cochran should be excluded. Defendants contend that Dr. Cochran opines that they should have determined the effects of the modifications on the neutral point and that the aft center of gravity limit in a DHC-3 modified with a Texas Turbine conversion should have been 3.12 inches forward of

³⁵Id. at 78:1-19.

³⁶Exhibit G, Memorandum in Support of RAC’s Motion in Limine No. 2 (Cochran), Docket No. 312. McGahan confirmed this information at his deposition. Exhibit F, Memorandum in Support of RAC’s Motion in Limine No. 2 (Cochran), Docket No. 312.

the authorized 152.2. But, defendants argue that Dr. Cochran did not explain in his report how the alleged failure to conduct flight tests or the possibility of a more forward aft center of gravity limit caused the accident. And, defendants point out that the NTSB's Weight and Balance Study found it likely that the accident aircraft was loaded 5.58 inches "past the aft CG envelope limits of 152.2."³⁷ In other words, according to defense expert Mark Madden, "the accident airplane was loaded 34% aft of the aft CG limit. . . ."³⁸ Defendants argue that this makes Dr. Cochran's causation opinion irrelevant because under either his theory or the allowable limit, the accident aircraft was loaded too far aft.

Dr. Cochran's causation opinions tend to establish why the crash occurred. Defendants may attack these opinions on cross-examination. But, Dr. Cochran's causation opinions are not irrelevant.

As a final matter, defendants bring up the question of a Daubert hearing. If the court is inclined to deny their motions to exclude Dr. Cochran's testimony, then they request a Daubert hearing. "The district court has discretion whether to hold a Daubert hearing in determining whether to admit expert testimony." Millenkamp v. Davisco Foods Int'l, Inc., 562 F.3d 971, 979 (9th Cir. 2009). "An evidentiary hearing under Daubert is not required where the parties' 'briefing on [the expert's] scientific expertise and proposed testimony'

³⁷Expert Report of the Crash of DHC-3 Otter N93PC at 15, Exhibit D, Texas Turbine Conversions, Inc.'s Motion to Exclude Testimony of Plaintiffs' Expert John Cochran, Docket No. 268.

³⁸Id. at 16.

provides an ‘adequate record from which the court could make its ruling’ as to admissibility.”

In re: Yosemite Nat’l Park Hantavirus Litig., Case No. 14-md-02532-MMC, 2018 WL 1033307, at *3 (N.D. Cal. Feb. 23, 2018) (quoting Millenkamp, 562 F.3d at 979). A Daubert hearing is not necessary in this instance. The parties’ extensive briefing provided an adequate record for the court to evaluate whether Dr. Cochran’s opinions and testimony were admissible pursuant to Rule 702.

Conclusion

Defendants’ motions in limine to exclude Dr. Cochran’s testimony³⁹ are denied.

DATED at Anchorage, Alaska, this 22nd day of April, 2020.

/s/ H. Russel Holland
United States District Judge

³⁹Docket Nos. 268 and 311.